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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/970,066	11/13/1997	PRADEEP K. DHAL	C-8232	2141
20349	7590	05/04/2004	EXAMINER	
POLAROID CORPORATION PATENT DEPARTMENT 1265 MAIN STREET WALTHAM, MA 02451			ANGEBRANDT, MARTIN J	
			ART UNIT	PAPER NUMBER
			1756	

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

08/970,066

Applicant(s)

DHAL ET AL.

Examiner

Martin J Angebrannt

Art Unit

1756

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 06 April 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
2. ☐ The proposed amendment(s) will not be entered because:  
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ they raise the issue of new matter (see Note below);  
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_


3. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.  
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.  
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: none.Claim(s) objected to: none.Claim(s) rejected: 28-40.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.  
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.  
10. ☐ Other: \_\_\_\_\_

  
Martin J Angebrannt  
Primary Examiner  
Art Unit: 1756

Continuation of 3. Applicant's reply has overcome the following rejection(s): The rejection over Sato et al , in view of Key et al. The rejection under 35 USC 112 of claims not reciting the limitations of formula IV. .

Continuation of 5. does NOT place the application in condition for allowance because: The basis for 2-10 or 3-10 siloxane groups refers to those embraced by other formulae and not to formula IV and therefore have no bearing on that formula. The applicant would be permitted to amend the claims to use the teachings of US patent 5,523,374 with respect to the embodiments of formula IV based upon the language in the specification, but the teachings in that patent seem to be to 6-11 siloxane units. Therefore the rejection of claim 36-38 under 35 USC 112 is maintained. The rejections of claims 28 and 30 over Watt and the rejection of claim 28 over Meier et al. '233 (incorrectly Watt in paragraph 5, page 4 of the final office action as discussed over the telephone) are maintained as the polymeric binders being different chemically (different chemical classes, a vinyl polymer polyvinyl pyrrolidone vs. and epoxide polymer) from the polymers resulting from the polymerization would inherently have different refractive indices from the polymers generated in the cationic polymerization. The scope of "significantly different" does not provide a lower limit on how different these refractive indices must be. This argument applies to both lines of rejection. The applicant and examiner continue to disagree on the analogous nature of teachings between cationic polymerization (Dhal et al. WO 97/13183 and Ohe et al. '345) and free radical polymerization (Keys et al. and Cornforth et al.). The position of the examiner is that one of ordinary skill in the art would recognize that crosslinking requires multifunctional monomers (two or less will not allow a polymeric strand/chain to attach to another) and that the formation of a three dimensional network of crosslinking will form a more rigid matrix, because polymeric strands/chains going in different directions will serve to stabilize each other and maintain their positional relationship, much like scaffolding does with crossbars. The prior art clearly indicates the use of multifunctional monomers for increased crosslinking (Keys et al and Cornforth et al.) to generate hardness (Cornforth et al.) and the use of the multifunctional monomers increases cure rates and hardness which are described as beneficial by Cornforth et al. which provides motivation). The examiner notes that all the references applied are within the field of photopolymerizable compositions and as evidenced by Haugh et al. 526, the use of photoresists/photopolymers as holographic recording materials is old and well known. (1972). The examiner is of the position that as it is clear that crosslinking cannot occur with free radically polymerizable monomers having less than three functional moieties, one of ordinary skill in the art would recognize that it is the same for monomers undergoing polymerization using other mechanisms, including cationically polymerizable materials. Two or less monomers can only form a single strand/chain.

46  
4/29/04